

## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,913	,	01/25/2002	Harish C. Joshi	E2690/268902	3014
23370	7590	01/10/2003			
JOHN S. PI			EXAMINER		
KILPATRIC		•	JONES, DWAYNE C		
<b>SUITE 2800</b>			ADTIDUT	DADED MILITED	
ATLANTA,	GA 303	09	ART UNIT	PAPER NUMBER	
				1614	#8
				DATE MAILED: 01/10/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

c		Application No.	Applicant(s)
		10/056,913	JOSHI ET AL.
	Office Action Summary	Examiner	Art Unit
		Dwayne C Jones	1614
Period fo	The MAILING DATE of this communication a or Reply	ppears on the cover	sheet with the correspondence address
THE N - Exten after: - If the - If NO - Failui - Any re	ORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION sions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reperiod for reply is specified above, the maximum statutory perions to reply within the set or extended period for reply will, by statute ply received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	l. 1.136(a). In no event, howe ply within the statutory min d will apply and will expire s ate, cause the application to	ver, may a reply be timely filed imum of thirty (30) days will be considered timely. SIX (6) MONTHS from the mailing date of this communication. become ABANDONED (35 U.S.C. § 133).
1)🛛	Responsive to communication(s) filed on 23	<u> October 2002</u> .	
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ 7	This action is non-fi	nal.
3) 🗌 Dispositi	Since this application is in condition for allow closed in accordance with the practice unde on of Claims		mal matters, prosecution as to the merits is 1935 C.D. 11, 453 O.G. 213.
4) 🖾	Claim(s) 1-22 is/are pending in the application	on.	
	4a) Of the above claim(s) is/are withdr	awn from considera	ation.
5) 🗌	Claim(s) is/are allowed.		
6)🖂	Claim(s) 1-22 is/are rejected.		•
7)	Claim(s) is/are objected to.		
8) 🗌	Claim(s) are subject to restriction and	or election requirer	ment.
Application	on Papers		
9) 🔲 7	The specification is objected to by the Examir	ier.	
10) 🔲 🛚	Γhe drawing(s) filed on is/are: a)⊡ acc	epted or b) objecte	ed to by the Examiner.
	Applicant may not request that any objection to	the drawing(s) be held	d in abeyance. See 37 CFR 1.85(a).
11) 🔲 7	The proposed drawing correction filed on	is: a)□ approve	d b) disapproved by the Examiner.
	If approved, corrected drawings are required in r	• •	ion.
12) 🔲 7	The oath or declaration is objected to by the E	xaminer.	
Priority u	nder 35 U.S.C. §§ 119 and 120		
13)	Acknowledgment is made of a claim for foreign	gn priority under 35	U.S.C. § 119(a)-(d) or (f).
a)[	☐ All b)☐ Some * c)☐ None of:		
	1. Certified copies of the priority document	nts have been rece	ved.
	2. Certified copies of the priority document	nts have been rece	ved in Application No
	application from the International B	Bureau (PCT Rule 1	ve been received in this National Stage 7.2(a)).
	ee the attached detailed Office action for a lis		
			5 U.S.C. § 119(e) (to a provisional application).
15)⊠ A	□ The translation of the foreign language p acknowledgment is made of a claim for dome:		
Attachment	•	· 	
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4)	Interview Summary (PTO-413) Paper No(s)  Notice of Informal Patent Application (PTO-152)  Other:
.S. Patent and Tra PTO-326 (Rev		Action Summary	Part of Paper No. 8

Art Unit: 1614

#### **DETAILED ACTION**

Page 2

#### Status of Claims

- 1. Claims 1-22 are pending.
- 2. Claims 1-22 are rejected.

### Response to Arguments

3. Applicants' arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

# Information Disclosure Statement

4. The information disclosure statement filed on July 30, 2002 has been reviewed and considered, see enclosed copy of PTO FORM 1449.

# Claim Rejections - 35 USC § 112

- 5. The rejection of claims 19-22 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the treatment of tumors, does not reasonably provide enablement for the prevention of tumors is withdrawn in response to the amendment of October 23, 2002.
- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

Art Unit: 1614

applicant regards as the invention. The following explanation supports this rejection. Independent claims 1 and 19 state that the variable of D can be represented by the group "-CH(O)-" However, the valencey of the carbon atom is exceeded in for this group. As a result, these claims are rendered vague and indefinite.

8. The rejection of claims 19-22 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, specifically regarding the anomaly with listing of component (a) is withdrawn in view of the amendment of October 23, 2002.

## Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 11. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ye et al. in view of the following four articles entitled, "Offering Hope in the Treatment of

Art Unit: 1614

Brain Caner," [online], [retrieved on 2002-01-16], retrieved from the Internet <URL:http://www.gliadel.com >; the article entitled "A General Description", [online]. [retrieved on 2002-01-16], retrieved from the Internet <URL: http://www.alzet.com/products/products-sec01.html >; the website article entitled, "Duros", [online], [retrieved on 2002-01-22], retrieved from the Internet <URL: http://www.durect.com/wt/durect/page-name/duros>; and the article entitled, "The Brain Infusion Kit and Brain Infusion Kit II", [online], [retrieved on 2002-01-16], retrieved from the Internet <URL: <a href="http://www.alzet.com/products/products-sec05.html">http://www.alzet.com/products/products-sec05.html</a>. Ye et al. disclose of the administration of the alkaloid, noscapine, as an antitumor agent, (see pages 1601 and 1606). The website article entitled, "Offering Hope in the Treatment of Brain Caner," [online], [retrieved on 2002-01-16], retrieved from the Internet <URL: <a href="http://www.gliadel.com">http://www.gliadel.com</a> >teaches of the mode of administering a pharmaceutical as a wafer, (see article). Next, the website article entitled, "A General Description", [online], [retrieved on 2002-01-16], retrieved from the Internet <URL: http://www.alzet.com/products/products-sec01.html > discloses of osmotic pumps for the administration of pharmaceuticals, (see article). The website article entitled, "Duros", [online], [retrieved on 2002-01-22], retrieved from the Internet <URL: http://www.durect.com/wt/durect/page-name/duros> provides the skilled artisan with the motivation to employ implant technology for the administration of pharmaceuticals to an individual, (see article). In addition, the website article entitled, "The Brain Infusion Kit and Brain Infusion Kit II", [online], [retrieved on 2002-01-16], retrieved from the Internet

Art Unit: 1614

<URL: <a href="http://www.alzet.com/products/products-sec05.html">http://www.alzet.com/products/products-sec05.html</a> discloses of the administration of pharmaceutically active agents brain infusion kits, (see article). The instant invention recites various modes and methods for pharmaceutical administration, such as implantable devices, delivery pumps, wafers. It is well within the purview of the skilled artisan to determine dosages, modes and methods of administration. In addition, the one having ordinary skill in the art would be motivated to determine optimum amounts as well as modes and methods of administration in order to get the maximum effect of the pharmaceutical agent. Accordingly, these references make obvious the instant invention.

12. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ke et al. in view of the following four articles entitled, "Offering Hope in the Treatment of Brain Caner," [online], [retrieved on 2002-01-16], retrieved from the Internet <URL: <a href="http://www.gliadel.com">http://www.gliadel.com</a> ; the article entitled "A General Description", [online], [retrieved on 2002-01-16], retrieved from the Internet <URL:

http://www.alzet.com/products/products-sec01.html >; the website article entitled, "Duros", [online], [retrieved on 2002-01-22], retrieved from the Internet <URL: <a href="http://www.durect.com/wt/durect/page-name/duros">http://www.durect.com/wt/durect/page-name/duros</a>>; and the article entitled, "The Brain Infusion Kit and Brain Infusion Kit II", [online], [retrieved on 2002-01-16], retrieved from the Internet <URL: <a href="http://www.alzet.com/products/products-sec05.html">http://www.alzet.com/products/products-sec05.html</a>>. Ke et al. disclose that the alkaloid of noscapine is effective in the inhibition of tumor growth, (see abstract and pages 223-224). The website article entitled, "Offering Hope in the Treatment of Brain Caner," [online], [retrieved on 2002-01-16], retrieved from the

Art Unit: 1614

Internet <URL:http://www.gliadel.com >teaches of the mode of administering a pharmaceutical as a wafer, (see article). Next, the website article entitled, "A General Description", [online], [retrieved on 2002-01-16], retrieved from the Internet <URL: http://www.alzet.com/products/products-sec01.html > discloses of osmotic pumps for the administration of pharmaceuticals, (see article). The website article entitled, "Duros", [online], [retrieved on 2002-01-22], retrieved from the Internet <URL: http://www.durect.com/wt/durect/page-name/duros> provides the skilled artisan with the motivation to employ implant technology for the administration of pharmaceuticals to an individual, (see article). In addition, the website article entitled, "The Brain Infusion Kit and Brain Infusion Kit II", [online], [retrieved on 2002-01-16], retrieved from the Internet URL: <a href="http://www.alzet.com/products/products-sec05.html">http://www.alzet.com/products/products-sec05.html</a> discloses of the administration of pharmaceutically active agents brain infusion kits, (see article). The instant invention recites various modes and methods for pharmaceutical administration, such as implantable devices, delivery pumps, wafers. It is well within the purview of the skilled artisan to determine dosages, modes and methods of administration. In addition, the one having ordinary skill in the art would be motivated to determine optimum amounts as well as modes and methods of administration in order to get the maximum effect of the pharmaceutical agent. For these reasons, these references make the instant application obvious to one having ordinary skill in the art.

13. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ye et al. in view of Windholz, M. et al., Editor, The Merk Index, 10<sup>th</sup> Edition. Ye et al. disclose of the administration of the alkaloid, noscapine, as an antitumor agent, (see

Art Unit: 1614

pages 1601 and 1606). Windholz et al. teach of various and sundry antineoplastic and antitumor agents, such as cyclophosphamide, cisplatin, vinblastine, vincristine and vindensine, (see pages 394, 329, 1427, 1428, 1428 and 1428-1429, respectively). "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. . . .[T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). For these reasons, it would have been obvious to one having ordinary skill in the art to modify the prior art teachings by combining these pharmaceuticals, especially when they possess the same utility as antineoplastic agents.

14. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ke et al. in view of Windholz, M. et al., Editor, The Merk Index, 10<sup>th</sup> Edition. Ke et al. disclose of the administration of the anti-microtubule agent of noscapine as an effective chemotherapeutic agent for the treatment of human cancer, (see pages 217 and 223 and 224). Windholz et al. teach of various and sundry antineoplastic and antitumor agents, such as cyclophosphamide, cisplatin, vinblastine, vincristine and vindensine, (see pages 394, 329, 1427, 1428, 1428 and 1428-1429, respectively). "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. . . .[T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ

Art Unit: 1614

1069, 1072 (CCPA 1980). Thus, the skilled artisan would have been motivated to combine the prior teachings of Ke et al. in view of Windholz, M. et al. in order to generation a new composition which is used for the very same utility.

- 15. The rejection of claims 1-18 under 35 U.S.C. 103(a) as being unpatentable over Al-Yahya et al. in view of Hyon et al. of U.S. Patent No. 5,100,669 is removed in response to the amendment of October 23, 2002.
- 16. The rejection of claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Al-Yahya et al. in view of Bar-Shalom et al. of U.S. Patent No. 5,213,808 is removed in response to the amendment of October 23, 2002.
- 17. The rejection of claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sam et al. in view of Hyon et al. of U.S. Patent No. 5,100,669 is removed in response to the amendment of October 23, 2002.
- 18. The rejection of claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sam et al. in view of Bar-Shalom et al. of U.S. Patent No. 5,213,808 is removed in response to the amendment of October 23, 2002.

# Obviousness-type Double Patenting

19. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

Art Unit: 1614

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20. Claims 1-18 are rejected under the judicially created doctrine of obviousnesstype double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,376,516 in view of the following four articles entitled, "Offering Hope in the Treatment of Brain Caner," [online], [retrieved on 2002-01-16], retrieved from the Internet <uRL:http://www.gliadel.com >; the article entitled "A General Description", [online]. [retrieved on 2002-01-16], retrieved from the Internet <URL: http://www.alzet.com/products/products-sec01.html >; the website article entitled, "Duros", [online], [retrieved on 2002-01-22], retrieved from the Internet <URL: http://www.durect.com/wt/durect/page-name/duros>; and the article entitled, "The Brain Infusion Kit and Brain Infusion Kit II", [online], [retrieved on 2002-01-16], retrieved from the Internet <URL: http://www.alzet.com/products/products-sec05.html>. U.S. Patent No. 6,376,516discloses of the administration of the noscapine compounds of formula (I) as an effective chemotherapeutic agent for the treatment of human cancer and tumor cells. The website article entitled, "Offering Hope in the Treatment of Brain Caner," [online], [retrieved on 2002-01-16], retrieved from the Internet <URL: <a href="http://www.gliadel.com">http://www.gliadel.com</a> >teaches of the mode of administering a pharmaceutical as a wafer, (see article). Next, the website article entitled, "A General Description", [online], [retrieved on 2002-01-16], retrieved from the Internet <URL:

http://www.alzet.com/products/products-sec01.html > discloses of osmotic pumps for

Art Unit: 1614

the administration of pharmaceuticals, (see article). The website article entitled, "Duros", [online], [retrieved on 2002-01-22], retrieved from the Internet <URL: http://www.durect.com/wt/durect/page-name/duros> provides the skilled artisan with the motivation to employ implant technology for the administration of pharmaceuticals to an individual, (see article). In addition, the website article entitled, "The Brain Infusion Kit and Brain Infusion Kit II", [online], [retrieved on 2002-01-16], retrieved from the Internet <URL: <a href="http://www.alzet.com/products/products-sec05.html">http://www.alzet.com/products/products-sec05.html</a> discloses of the administration of pharmaceutically active agents brain infusion kits, (see article). The instant invention recites various modes and methods for pharmaceutical administration, such as implantable devices, delivery pumps, wafers. It is well within the purview of the skilled artisan to determine dosages, modes and methods of administration. In addition, the one having ordinary skill in the art would be motivated to determine optimum amounts as well as modes and methods of administration in order to get the maximum effect of the pharmaceutical agent. For these reasons, these references make the instant application obvious to one having ordinary skill in the art.

21. Claims 19-22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6,376,516 in view of Windholz, M. et al., Editor, The Merk Index, 10<sup>th</sup> Edition. U.S. Patent No. 6,376,516discloses of the administration of the noscapine compounds of formula (I) as an effective chemotherapeutic agent for the treatment of human cancer and tumor cells. Windholz et al. teach of various and sundry antineoplastic and antitumor agents, such as cyclophosphamide, cisplatin, vinblastine, vincristine and

Art Unit: 1614

vindensine, (see pages 394, 329, 1427, 1428, 1428 and 1428-1429, respectively). "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. . . [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Thus, the skilled artisan would have been motivated to combine the prior teachings of U.S. Patent No. 6,376,516 in view of Windholz, M. et al. in order to generation a new composition which is used for the very same utility.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. C. Jones whose telephone number is (703) 308-4634. The examiner can normally be reached on Mondays through Fridays from 8:30 am to 6:00 pm. The examiner can also be reached on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marianne Seidel can be reached on (703) 308-4725. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

1235.

PRIMARY EXAMINER

Tech Ctr 1614